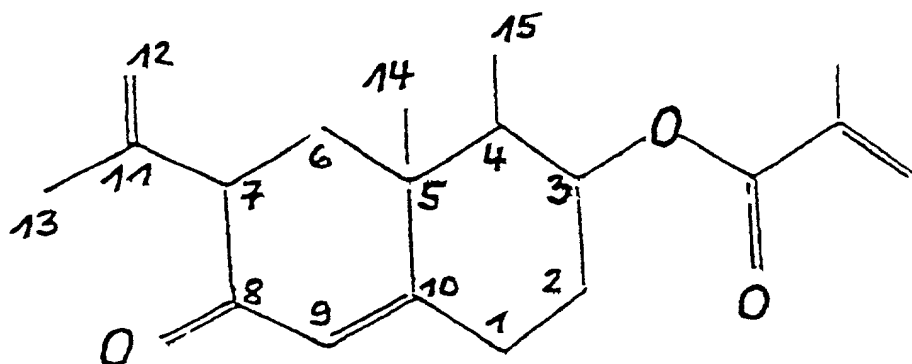


## Patent claims

1. Anti-petasin antibodies for detecting petasin or petasin protein conjugates in physiologic fluids which do not show any cross reactivity to derivatives, structural analogues or metabolites of petasin.
2. Method for producing anti-petasin antibodies wherein polyclonal or monoclonal antibodies are produced by immunization of mammals and/or birds with petasin or petasin derivatives of the general formula I



and antibodies are obtained by means of the hybridome technique or recombinantly with the aid of antibody libraries.

3. Method according to claim 2 wherein derivatives coupled to carrier molecules are used as petasin derivatives for immunization.
4. Method according to claim 3 wherein derivatives of petasin are used for immunization where the keto group in position 8 has been replaced by a carboxyl group and coupled to bovine serum albumin by means of EDAC.
5. Method according to claim 3 wherein derivatives of petasin are used for immunization where the keto group in position 8 has been replaced by a carboxyl group and coupled to a bovine serum albumin through activated hydrazide dextran or fibrogen.
6. Method according to claims 4 and 5 wherein the insertion of the carboxyl group is effected with carboxymethylhydroxyamine forming oxime.

7. Method according to claim 3 wherein derivatives of petasin are used for immunization where the double bond in positions 11, 12 is bromated and coupled to bovine serum albumin by means of a Traut's reagent.
8. Method according to claim 3 wherein derivatives of petasin are used for immunization where angelic acid is split off and the remaining petasol is coupled to a carrier through chloroformic acid ester.
9. Use of anti-petasin antibodies for detecting petasin or petasin protein conjugates in physiologic fluids.
10. Use according to claim 9 wherein they do not show any cross reactivity to derivatives, structural analogues or metabolites of petasin.
11. Use according to claims 9 and 10 wherein either petasin, petasin protein conjugates or anti-petasin antibodies are equipped with a marker.
12. Use according to claim 11 wherein markers are enzymes, fluorescent dyes, radio isotopes or redoxactive compounds.
13. Use according to one of the claims 9 to 12 wherein petasin bound to antibodies is detected optically, electrochemically, fluorimetrically or radiochemically.
14. Use according to claim 13 wherein a colour reagent is used.
15. Use according to claim 13 wherein the detection is carried out chromatographically.
16. Use according to one of the claims 9 to 15 wherein the reactants are present in a homologous solution.
17. Use according to one of the claims 9 to 16 wherein either anti-petasin antibodies, the petasin to be detected or the petasin protein conjugates are bound to a solid phase and a washing process takes place between the reaction steps.
18. Use according to claim 17 wherein anti-petasin antibodies, the petasin to be detected or the petasin protein conjugates are bound adsorptively to a solid phase or covalently after a preceding chemical activation of the solid phase.
19. Use according to claims 17 and 18 wherein the solid phase consists of polystyrene.
20. Use according to one of the claims 17 to 19 wherein the solid phase has a differing geometric shape.
21. Use according to claim 20 wherein in the form of a microtitration plate and a tube it shows a spherical or planiform shape.
22. Test kit for detecting petasin in physiologic fluids comprising anti-petasin antibodies,

a solid phase or polystyrene,

washing solution,

dilution buffer,

enzyme marked petasin.

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